ABSTRACT OF THE DISCLOSURE

A device and a method for estimating an open-loop pitch in a general speech CODEC are disclosed. The open-loop pitch estimation device includes an autocorrelation function calculation unit which calculates a normalized autocorrelation function from a perceptual weighing filtered speech signal, a maximum autocorrelation function and lag estimation unit which estimates a maximum autocorrelation function and candidates for the maximum autocorrelation function, a pitch candidate decision unit which decides candidates for a pitch by using the ratio of the estimated maximum autocorrelation function to the candidates for the estimated maximum autocorrelation function, and lags of which values are smaller than a predetermined threshold value, and a pitch estimation unit which estimates a pitch between the candidates for a pitch and the lags corresponding to the estimated maximum autocorrelation function by using a pitch of a previous frame of the speech signal.